NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

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Imagery analysis report

Resolution Target and Color/Contrast Panels Identified at Changchun (Chang-chun)/ Dafangshen (Ta-fang-shen) Airfield, PRC (S)

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RESOLUTION TARGET AND COLOR/CONTRAST PANELS IDENTIFIED AT CHANGCHUN (CHANG-CHUN)/DAFANGSHEN (TA-FANG-SHEN) AIRFIELD, PRC

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INTRODUCTION

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1. A resolution target containing a Sieman star, a tribar array, edge scan bars, and panels for differentiating color or black-and-white film contrast were identified at Changchun (Chang-chun)/Dafangshen (Ta-fang-shen) Airfield in the Shenyang Military Region (MR) of the People's Republic of China (PRC). This is the first identification of a Sieman star and the third identification of a resolution target in the PRC. Previously, tribar resolution targets had been identified at Xian/Xiaguan (Hsi-an/Hsi-kuan) Air-

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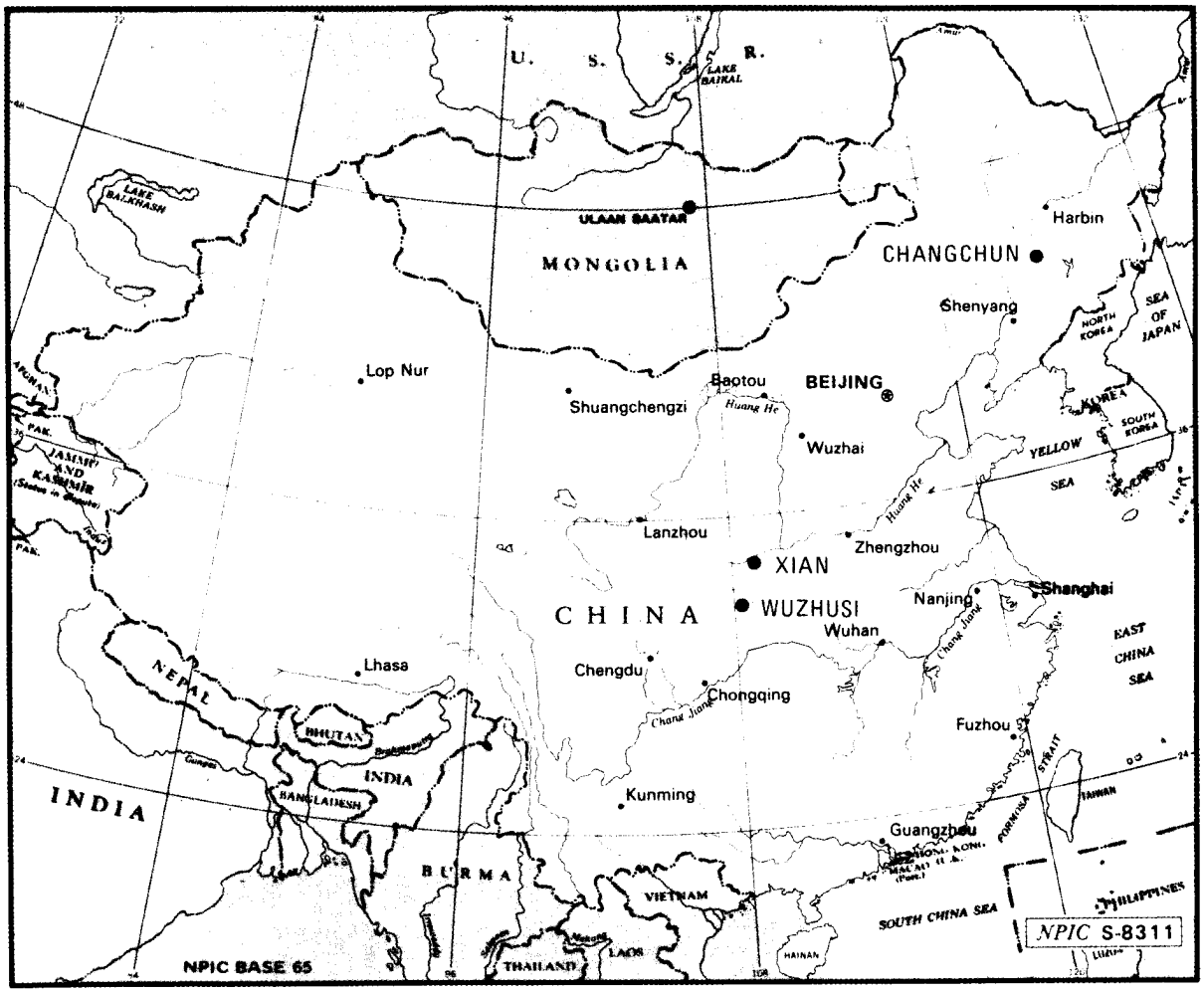

FIGURE 1. LOCATIONS OF IDENTIFIED RESOLUTION TARGETS IN THE PRC

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field [redacted] and Wuzhusi (Wu-chu-ssu) Airfield [redacted] in the Lanchou MR (Figure 1). In addition, this is the first identification of color/black-and-white contrast panels in the PRC. 25X1

BASIC DESCRIPTION

2. [redacted] The Sieman star resolution targets that have been seen in the USSR vary in size and consist of nine, 18, 24, or 36 sectors. The number of sectors has always been divisible by three. The Changchun star is similar to those observed in the USSR; is composed of 18 sectors, probably made of cloth; and has the following dimensions: 25X1

Diameter of star	29.0 m
Width of black points	2.0 m

[redacted] 25X1

With the use of an 18-sector Sieman star like the one at Changchun, lens response or resolution can be measured for each 20-degree sector throughout the aperture of the lens in all directions. Since the width of the widest end of the sectors of this particular star [redacted] it would be possible to measure the distance between objects which are less than [redacted] In contrast, a typical tribar array provides information in only two directions (intrack and crosstrack) of the flight line. 25X1 25X1

3. [redacted] Sieman stars observed in the USSR [redacted] however, they are not usually seen with a tribar array or edge scan bars. The identification at Changchun of a Sieman star collocated with a tribar array is the first observation of a Sieman star in the PRC. In the USSR, they have been seen together only at Feodosiya Camera Calibration Range [redacted] 25X1 25X1 25X1

4. [redacted] The single tribar array at Changchun, consisting of seven tribars, is adjacent to the Sieman star and parallel to the color/contrast panel. The presence of a single array is quite unusual. Usually, the tribar sets are laid out in two arrays at 90-degree angles to each other. The dimensions of the tribar array (Figure 2) are: 25X1

[redacted]

[redacted] 25X1

The average length-to-width ratio is approximately 5:1 (which is standard); the length and width increase in an approximate square-root-of-two progression. [redacted] 25X1
[redacted] 25X1. The tribar array is not essential at a resolution target when a Sieman star is also present. The mensuration factors that the tribars provide are redundant to those obtainable from the Sieman star, which provides a much greater resolution range.

5. [redacted] The Sieman star, color/contrast panels, and tribar array are enclosed by four edge scan bars arranged in a linear pattern. The first three consist of a single light-toned bar, and the fourth bar is divided into a light-toned area and a dark-toned area. The dimensions of the bars are: 25X1

[redacted] 25X1

The edge scan bars (Figure 2) are used for microdensitometric scans of imagery. The three single light-toned bars (bars 1, 2, and 3) provide the change in density from an unknown density to a known density, whereas the light- and dark-toned bar (bar 4) provides the change from two known densities.

6. [redacted] The ten contrast/color panels are parallel to the tribar array (Figure 3). The darker tones are toward the center, and the lighter tones are on the two ends. There is little discernible difference between the tones of the three panels closest to the Sieman star, which may be an indication that all of the panels are approximately the same size. 25X1

[redacted] 25X1

[redacted] 25X1

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TOP SECRET	[X] SECRET	CONFIDENTIAL	UNCLASSIFIED	19. CL. BY:	PAGE 6 OF

1. ORIGINAL DATE OF RETIREMENT | 2. OLD JOB #

3. JOB NO. | 4. RECORDS SCHEDULE 6077 | 5. OPI 19 | 6. DIVISION RSD | BRANCH DCB | SECTION | 7. DISPOSITION DATE (MMYY) PERM

8. ITEM NO.	9. BOX NO.	10. RES.	11. FILE NO.	12. FLD.	13. MEDIA	14. FILE TITLE	15. INC DATES DDMMYY DDMMYY
1c	1	Y		71		PI NOTICE 3-80	010180
							010180
				72		PI NOTICE 2-80	010180
							010180

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16. COMPONENT RMO _____ DATE _____

17. REVIEWING OFFICER _____ (PLEASE PRINT) DATE _____

18. INPUT OPERATOR _____ DATE _____

FORM 4-78 4034A USE PREVIOUS EDITIONS

(50)

INSTRUCTIONS FOR COMPLETING FORM

4034A "FILE REVIEW WORKSHEET"

Effective immediately, procedures for sending records to Records Center are the same as in the past except that in lieu of Form 140a, Records Shelf List, use Form 4034A, File Review Worksheet, prepared in triplicate. Pen entries on the 4034A are acceptable as long as they are clearly legible.

The Form 140, Records Retirement Request, is reinstituted for Archives deposits and these same procedures will be used for records retired there.

Routing is as follows for the 4034A:

1. Chief, RAB/ISAS/DDA, Room 5B2828 Hqs. (to be retained by RAB until data is entered into automated system).
2. Archives/Records Center, as appropriate, attached to the Form 140.
3. Originator—retention copy.

Form 4034A, File Review Worksheet, is used to record descriptive data about files that are being retired to the Agency Archives and Records Center. The File Review Worksheet is an intermediate form intended to allow a person who reviews a collection of files to record required data in draft. The data is then edited and keyed into a computer file which will be the official Records Shelf List.

JOB LEVEL DATA

1. *Enter the Original Date of Retirement*

This data is needed only if the File Review Worksheet is being prepared to document records already on deposit in the AARC. This is the date the old job number was assigned. This data item will not be entered into the computer file but should include day, month and year.

2. *Enter the Old Job Number*

This data is needed only if the File Review Worksheet is being prepared to document records already on deposit in the AARC. The old job number is the job number under which the records were deposited when the review began. This data item will not be entered into the computer file.

3. *Enter the Job Number*

This is the number assigned by AARC to account for their accessioning of records. A new number will be assigned each time records are sent to AARC, and whenever jobs on deposit in AARC must be broken up to allow new dispositions to be applied to records within a job. The job number consists of nine alphabetical/numerical characters, YYXNNNNNA, where

YY=Year of Deposit;

X=An alphabetical classification code (use a dash, — , in this position if code is not applicable).

NNNNN=A five digit sequential number. In the computer file five digits must be used. For example, Job No. 77-T-3 must be entered 77T00003A, and Job No. 68-195 must be entered 68-00195A.

A=A letter, either R or A, indicating whether the records are being deposited into the Records Center (an R) or into the Archives (an A).

4. *Enter the Number of the Records Control Schedule Which Covers the Disposition of These Records*

"Records Schedule" is a four digit field, NNYY, where NN = A two digit office or directorate identification code. YY = Year schedule was prepared. This number appears on your Records Control Schedule.

5. *Enter the Two Digit OPI Number Which Has Been Assigned by ISAS/RAB to the Office Which Has Primary Interest in These Records*

6. *Enter the Initials of the Division, Branch and Section Which is Depositing These Records in AARC*

Each of these three data items can have up to five alphabetical characters. Symbols may not be used (i.e., C&T for Compensation and Tax Division must be entered into the computer as CT).

7. *Enter the Disposition Date (Month and Year Only) Which Applies to This Job. If the Records Are Permanent, Write "Perm" in This Space. Leave Blank if the Records Are Unscheduled, or if a Precise Date is Not known.*

This data item consists of four alphabetical/numerical characters. Acceptable entries are either the word PERM or four numbers for month and year of disposition—MMYY. This data item may be left blank if the disposition date is dependent on an event which has not yet occurred (i.e., "Dispose of one year after discontinuance of the system").

FILE FOLDER DATA

8. *Enter the Item Number (Within the Records Control Schedule) Which Applies to the File Folder Being Described.*

The Item Number consists of eight alphabetical and numerical characters, NNNANNAN, where

NNN=A three digit primary item number within the records control schedule.

A=A letter representing the first sub-item paragraph.

NN=A two digit number representing the second sub-item paragraph.

A=A letter representing the third sub-item paragraph.

N=A number representing the fourth sub-item paragraph.

You will seldom use all of these paragraph levels. If the item number does not use all sub-item paragraphs, type only those paragraph levels which apply. For example, item 1.B.[1][C] would be keyed into the computer 001B01Cb (where b represents a space you should leave blank). No punctuation should be keyed.

9. *Enter the Box Number Assigned to the Box the File Folders Will be Stored in*

The box number is a four digit sequential number assigned by the depositing component to each box within a job. Box number 1 must be keyed into the computer 0001.

10. *Enter the Access Restriction Code Which Will Apply to This File Folder. Leave Blank if No Special Access Restriction Applies*

This data item is optional. A component may wish to develop a restriction code scheme to limit access to some or all of the folders they deposit in AARC. If a restriction code scheme is developed, a written description of the code scheme must be provided to AARC. Two characters, either alphabetical or numerical or both, may be used. By placing the letter Y (for yes) in the right position of this data item, the depositor can indicate that a special restriction is placed on access to this folder. In this case the restriction need only be specified on the Form 140, Records Retirement Request, which is used to deposit this job.

11. *Enter the File Number Which Appears on the File Folder. Leave Blank if Not Applicable*

This data item is optional. Fifteen (15) alphabetical and/or numerical characters may be used in any format the depositing component wishes to develop. If a component wishes to use this data item, it is important that a format be defined for entering these numbers into the computer.

12. *Enter the Folder Number Which Represents the Sequential Position of This File Folder Within Its Box*

This data item consists of three digits. Folder number 1 must be keyed into the computer 001. (This number must also be written on the upper right corner of the file folder itself. Every box within a job will begin with file folder number 1.

13. *If the records being reviewed consists of one of the following types of materials, enter the alphabetical code which represents that type of material.*

Code	Type of Material	Explanation
A	Audio	Sound recorded on magnetic tape, Dictaphone belts, phonograph records, etc.
C	Computer Magnetic Media	Computer tapes, disks, diskettes, drums, and magnetic cards (including word processing cards).
D	Punched Paper Tape	A paper tape on which a pattern of holes or cuts is used to represent data.
E	Engineering Drawings	Technical drawings such as plans and blueprints.
F	Film	Single, self-contained, images on separate sheets of photographic film.
G	Filmstrip	A length of film containing photographs, diagrams, or other graphic matter prepared for still projection.
H	Photograph	An image, especially a positive print, recorded by a camera and reproduced on a photosensitive surface.
M	Microform	Roll microfilm, microfiche, aperture cards, etc.
N	Chart/Poster	A large sheet (other than a map) presenting information; usually used for briefings or announcements.
O	Motion Picture	A series of filmed images viewed in sufficiently rapid succession to create the illusion of motion and continuity.
P	Microscope Slide	Transparent or opaque objects mounted for viewing with a microscope.
Q	Model	A three-dimensional miniature object built to represent some existing object, or some object not yet constructed.
S	Slide	An image on a small piece of film prepared for still projection on a screen.
T	Transparency	An image that is made on a relatively large piece of glass or film and intended for projection.
U	Punched Card	A card punched with holes or notched to represent letters and numbers with a pattern of holes to represent data.
V	Video Tape	A magnetic tape used to record images which will be displayed as still pictures or motion pictures.
W	Video Disk	A disk that has spiral tracks which contain data that is retrieved optically or mechanically to produce an image.
X	Map	Representations of features on the earth, celestial bodies, or a region of the sky.
Y	Gift	An object such as an ornament, tool, or weapon received as a gift.

14. *Enter the Official File Folder Title. If Necessary, Add Any Meaningful Information About the Contents of the File Folder Which You Believe Will Aid in a Computer Search For These Records.*

This data item consists of 228 alphabetical/numerical characters which may be entered in any format. 228 characters are provided to allow space for a reasonably full description of the folder contents. Fewer than 228 characters may be used.

15. *Enter the Inclusive Dates for the Documents Included in the File Folder. Put the Date of the Earliest Document on the Top Line, and the Date of the Most Recent Document Just Below It. Dates Should Be Written Day, Month, Year.*

This data item consists of 12 numerical digits, DDMMYYDDMMYY. The first 6 digits represent the earliest document in the folder, and the last six digits represent the latest document. Inclusive years are required and must be estimated if not known. If a day or month is not known, enter 01 for the earliest possible day and month, and 31 and 12 respectively for the latest possible day and month.

REVIEW AND APPROVAL

(Will not be entered into the computer file)

16. *Print the Name of the Component RMO Responsible for This Deposit, and the Date the RMO Completes the Actions He Wishes to Take.*

17. *Print the Name of the Reviewing Officer for This Job. Enter the Date the Job Review Was Completed.*

18. *Print the Name of the Person Who Input the Data on This Form Into the Computer. Enter below This Name the Input Date.*

19. *Review the Completed Worksheet to Determine Its Classification. Place an X in the Space Preceeding This Classification at the Top of the Form. Enter the Employee Number of the Classifier. Enter the Downgrading Instructions in the White Space below the Classifier's Number.*